

Temperature Measurements in Glass Melting
Tanks, by R. Gunther, 4 pp.

GERMAN, per, Glastechnische Berichte,
Vol XXVIII, No 8, 1955, pp 295-299.

CSIRO

Sci - & Phys
Nov 61

174,380

Dependence of the Transformation Temperature of
of Mill Glass on the Previous Heat Treatment and
on the Conditions of the Experiment, by F. Rahlfs,
K. P. Zehel. UNCLASSIFIED

GREENMAN, pos, Glastech Berichte, Vol XXVIII, No 8,
1955, pp 310-312.

DSIR/32470/CT

Sci - Chem; Phys
Cat 58

75,432

Temperature Measurements in Glass Molds,
by W. Trier. 63 p.
GERMAN, per, Glastechnische Berichte,
Vol 28, No 9, 1955, pp 336-351.
SLA TT-66-10671

Sci-M&M
Jul 66

305,599

Methods of Mould Cooling in Glass-Forming
Machines, by R. Wille, 8 pp.

GERMAN, per, Glastechnische Berichte,
Vol XXVIII, No 9, 1955, pp 351-359.

CSIRO

Sci - Phys
Nov 61

174,383

Schreck, Carl Walter.
CONTRIBUTION TO THE DETERMINATION OF THE
HEAT FLUX IN THE WALLS OF GLASS MOLDS
(Beitrag zur Ermittlung des Wärmeflusses in den
Wänden von Glasformen). [1963] [38p] (foreign text
included) 10refs

Order from SLA \$3.60

63-18590

Trans. of Glastechnische Berichte (West Germany)
1955, v. 28, no. 9, p. 359-368.

DESCRIPTORS: *Glass, Molding, Heat transfer, Walls,
Cooling, Temperature, Distribution, Determination,
Thermal conductivity.

The heat flux and with it the temperature distribution
in the mold can be discussed approximately as a
stationary problem under the condition of constant
heat flow density at the internal margin. The problem
(Materials--Ceramics, TT, v. 10, no. 10) (over)

63-18590

I. Schreck, C. W.

Office of Technical Services

Scholze, Horst and Dietzel, Adolf.
INVESTIGATIONS ON THE WATER CONTENT OF
GLASSES THROUGH DETERMINATION OF THE IN-
FRARED ABSORPTION IN THE RANGE FROM 1 TO
5 μ (Untersuchungen über den Wassergehalt von
Gläsern durch Bestimmung der Ultrarot-Absorption im
Bereich von 1 bis 5 μ). [1962] [21]p. (foreign text
included) 42 refs.
Order from SLA \$2.60

62-10945

Trans. of Glastechnische Berichte (West Germany)
1955, v. 28, no. 10, p. 375-380.

DESCRIPTORS: *Water, *Glass, *Infrared radiation,
*Absorption, Iron, Sodium, Calcium, Hydroxides,
High temperature research.

A literature compilation is given on the infrared ab-
sorption of glasses in the range from 1 to 5 μ , with
special regard for the bands produced by OH- or
(Materials--Ceramics, TT, v. 8, no. 7) (over)

62-10945

I. Scholze, H.
II. Dietzel, A.

Office of Technical Services

The Fundamental Reactions in the Process of Fusion
of Sulphate Glass, by C. Kroger, E. Vogel.

GERMAN, per, Glastech Ber, Vol XXVIII, 1955,
pp 426-437.

INSDOC-TL383

Sci
Aug 58

70,795

The Action of Silicon Containing Lacquer Protective Agents on Windscreens, by R. Ramsauer.

GERMAN, per, Glastech Ber, Vol XXVIII, No 12, 1955
pp 451-455.

DSIR/31209/CT

Sci - Chem
Feb 58

58,856

Electron Microscope Investigations
of Fracture Surface of Opal Glass,
by F. Kerkhof, R. Seeliger. W. Westphal.
GERMAN, per, Glastechnische Berichte,
Vol 28, No 7, 1955, pp. 262-4.
NTC 69-11730-11B

Sci-~~Whem~~
July 89

386,671

Replica Techniques Useful for the
Investigation of Glass Surfaces
Microscopically, by W. Geilman, G.
Toelg.

GERMAN, per, Glastechnische Berichte,

Vol 28, No 8, ~~pp5529pp~~302091007

Ntc 69-11734-11B

No. 8, 1955 R209-307

Sci-Mat

July 69

386,675

Dietzel, Adolph and Brijckner, Rolf.
CONSTRUCTION OF AN ABSOLUTE VISCOSIMETER
FOR HIGHER TEMPERATURES AND ITS CALIBRA-
TION BY MEASURING OF VISCOSITIES OF MOLTEN
BORIC ACID. 30p 26refs
Order from SLA \$2.60

TT-64-16336

Trans. of Glastechnische Berichte (West Germany)
1955, v. 28 [no. 12] p. 455-467.

(Materials--Ceramics, TT, v. 12, no. 3)

TT-64-16336

I. Dietzel, A.
II. Brijckner, R.

Office of Technical Services

On the Dissipation of Heat in Glass at High Tempera-
tures, Pt. 3, by W. Geffcken.

GERMAN, Par, Glastechn Ber, Vol XXIX, No 2, 1956,
pp 42-49.

SLA 60-16852
ASLIB-GB105

Sci

Aug 59

94,177

The Fining of Glass by Introducing
Additional Gases in the Melt, by J. ~~Widmann~~
Widtmann.

GERMAN, per, Glastechnische Berichte,
Vol 29, No 2, 1956, pp. 37-42.
NTC 69-11729-11B

Sci-Name
July 69

386,670

<p>Riedel, Leopold. OBSERVATIONS ON STREAMS AND DROPS (Beobachtungen an Flüssen und Tropfen). [1962] 5p. 1 ref. Order from SLA \$1.10</p> <p>Trans. of Glastechn[ische] Ber[ichte] (West Germany) 1956, v. 29, no. 2, p. 49-51.</p> <p>DESCRIPTORS: *Glass, Processing, Ceramic materials Solutions, *Fused materials, *Melting, Temperature, Silicates, Impurities, *Quartz crystals, Quartz.</p> <p>(Materials--Ceramics, TT, v. 9, no. 5)</p>	<p>62-18203</p> <p>1. Title: Cohart block 1. Riedel, L.</p> <p>Office of Technical Services</p>
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On Thermoelectric Phenomena in Glass,
by W. Oldekop.

GERMAN, per, Glastechnische Berichte,
Vol XXIX, 1956, pp 73-78.

ASLIB GB 105

USIAO

Sci - Phys
Apr 62

192, 107

Experimented Investigation of Bubble Formation in
Electrically Heated Model Glass Tanks, by K.
Shmiede.

GERMAN, per, Glastech Ber, Vol XXIX, No 3, Mar 1956,
pp 78-83.

ASLIB-QB105

Sci

SLA 63-14065

Aug 59

94, 183

On the Sensitivity of the Interference and
"Schlieren" Methods of Examining Layering
in Sheet Glass, by H. Hannes.

GERMAN, per, Glastechnische Berichte,
Vol. XXIX, No 3, 1956, pp 83-89.

REC-10

Sci - Phys
Jun 62

199,602

Electron Microscope Investigations on Weathered
Glass Surfaces, by F. Oberlies,

GERMAN, par, Glastechnische Berichte, Vol XXIX,
No 4, Apr 1956, pp 109-120.

ASLIB-GB105

Sci

Aug 59

95, 372

Observations on the Action of Dilute Hydro-
fluoric Acid on Glass Surfaces, by Boneff,
Stoyan, Schviets, Hans Ernst, 29 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 4, pp 120-128.

SLA 59-10616

Sci - Chem
OTS I, 12
Jul 59

92, 296

The Structure at the Edge of Water Droplets
in Contact with Glass and Its Significance,
by Hans Jebsen-Marvedel, 8 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 4, pp 128-130.

SLA 59-10618

Sci - Phys
OTS I, 12
Jul 59

92, 302

62-14499

Witten, Johannes Loeffler.
TESTING OF SHEET GLASS FOR SENSITIVITY TO
CLIMATE. [1962] 16p. (5 figs. 21 refs. omitted).
Order from SLA \$1.60 62-14499

I. Witten, J. L.

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1956, v. 29, no. 4, p. 131-137.

DESCRIPTORS: *Glass, Sensitivity, *Climatic factors,
Test methods.

Sheet glass is decomposed by moisture only in its
packing, either by wet rain or when stored in moist
rooms. Two types of decomposition appear as damages,
which show, however, the same technical course and
produce the same typical defect, the so-called dulling,
which is absence of reflection by chemical changes in
the top layer. The testing method described here re-
produces, in contrast to all other methods, the defect
(Materials--Ceramics, TT, v. 8, no. 1) (over)

Office of Technical Services

Water Durability of Glass as Determined by
the German Powder Titration Method DIN 12111,
by Ernst Wiegel, 33 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 4, pp 137-144.

SLA 59-10617

Sci - Phys
OTS I, 12
Jul 59

92, 309

Introduction to the Fundamentals of Glass
Structure, by Otto W. Flörke, Lothar H. Lehnert,
Horst Scholze, 19 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 5, pp 169-174.

SLA 59-10615

Sci - Chem
OES I, 12
Jul 59

92,297

Günther, Rudolf and Kahlert, Wolfgang.
VARIATIONS IN THE HEAT CONSUMPTION OF TANKS
AND THEIR CAUSES (Veränderungen des
Wärmeverbrauchs von Wannen und ihre Ursachen).
[1962] [36]p. (foreign text included) 9 refs.
Order from SLA \$3.60 62-18112

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1956, v. 29, no. 5, p. 174-183.

DESCRIPTORS: *Glass, Melting, *Heat exchangers,
Heat of fusion, Tanks, Numerical analysis, Curve
fitting, Periodic variations, *Fuel consumption, Gas
generating systems, Specific heat, Aging.

(Materials--Ceramics, TT, v. 9, no. 3)

62-18112

1. Title: Tank furnaces
- I. Günther, R.
- II. Kahlert, W.

Office of Technical Services

Dynactive Liquid-Pairs, Their Behavior and
Practical Significance for Glass Melting,
by Hans Jehsen-Marvedel, 21 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 6, pp 233-238.

SLA 59-10608

Sci - Chem
OTS I, 12
Jul 59

92, 299

62-14863

Baier, Ernst, Schefer, Werner, and Steinwehr
Helmut Ernst v.

CONCERNING THE COLORATION OF BORAX GLASSES
BY IRON (Über die Färbung von Boraxgläsern durch
Eisen). [1962] [15] p. (foreign text included) 15 refs.
Order from SLA \$1.60 62-14863

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1956, v. 29, no. 6, p. 247-251.

DESCRIPTORS: *Glass, *Borax, *Iron, *Color, Spec-
trographic analysis.

The authors were able by metal-addition to obtain pure
ferro-borax glasses, and to demonstrate their ferri-
freedom chemically and optically. Production and test-
ing are described, and some spectral permeability
curves are reproduced. The visual color of the pure
ferro-glasses was blue. (Author)
(Materials--Ceramics, TT, v. 9, no. 1)

I. Baier, E.
II. Schefer, W.
III. Steinwehr, H. E. v.

Office of Technical Services

Gords in Glass - a Consequence of the
"Dyactive" Behaviour of "Schieren", by
H. Jebsenharwedel,

GERMAN, per, Glastechnische Berichte, Vol XXIX,
No 7, pp 269-275. 1956

SWA 63-1-000

C.S.I.E.O.

Eci - Chem

May 60

116,927

Origin and Tasks of the Glass Division of
the State Materials Testing Station in
Darmstadt, by Heinrich Wiegand, 20 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 8, pp 309-313.

SLA 59-10620

Sci - Phys
OBS I, 12
Jul 59

92; 308

62-14869

Lehnert, Lothar H.
DEVELOPMENT OF STANDARD TESTING METHODS
FOR HOLLOW GLASS VESSELS (Entwicklung von
Normprüfverfahren für Hohlglasgefäße). [Paper
presented] at the Glass Technology Meeting (no. 30)
Tübingen, 16 May 56. (foreign text included) 14 refs.
Order from SLA \$1.60 62-14869

I. Lehnert, L. H.
II. Title: Glas...

Trans. of Glastechnische Berichte (West Germany)
1956, v. 29, no. 8, p. 314-318.

DESCRIPTORS: *Glass, Containers, Test methods,
Standards, Quality control, *Pressure vessels,
Materials.

(Materials, TT, v. 8, no. 4)

Paetsch, Hans Hermann and Dietzel, Adolf.
INVESTIGATIONS ON THE $\text{PbO-SiO}_2\text{-P}_2\text{O}_5$ SYSTEM
(Untersuchungen über das System $\text{PbO-SiO}_2\text{-P}_2\text{O}_5$).
[1962] [47]p. (foreign text included) 42 refs.
Order from SLA \$4. 60 62-16461

Trans. of Glastechnische Berichte (West Germany)
1956, v. 29, no. 9, p. 345-356.

DESCRIPTORS: *Glass, *Phosphate glass, *Silicates,
*Lead compounds, Oxides, Microstructures, X-ray
diffraction analysis

The PbO -rich corner of the three-substance system
 $\text{PbO-SiO}_2\text{-P}_2\text{O}_5$ was examined with thermal, micro-
scopic and X-ray methods. The results available from
the binary systems PbO-SiO_2 and $\text{PbO-P}_2\text{O}_5$ were con-
firmed in general and supplemented in part. The ter-
nary system is characterized by a wide region of dis-
sociation and by the appearance of a ternary compound
(Materials--Ceramics, TT, v. 8, no. 7) (over)

62-16461

I. Paetsch, H. H.
II. Dietzel, A.

Office of Technical Services

Wetting Properties and Mechanical Strength of Glass
to Metal Seals, by W. Weiss.

GERMAN, per, Glastech Ber, Vol XXIX, No 10, 1956,
pp 386-392.

TIL Tr 4824

Sci - Physics
Mar 58

59,170

Heats of Solution and Formation of Sodium
Silicates, by C. Kroger, G. Kreitlow,

GERMAN, per, Glastechnische Berichte,
Vol XXIX, No 10, pp 393-400, 1956,

C.S.I.R.O.

Sci - Chem

May 60

116,928

OTS 62-18121

Flame Studies; Methods and Results, by
Rudolf Gunther, 37 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 11, pp 417-426.

SLA 59-10614

Sci - Chem
OTS I, 12
Jul 59

92,265

62-10949

Trier, Wolfgang.
ON THE DEVELOPMENT OF FLAMES (Über die
Ausbildung von Flammen). [1962] [10]p. (foreign text
included) 6 refs.
Order from SLA 51.10

62-10949

L. Trier, W.

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1956, v. 29, no. 11, p. 426-428.

DESCRIPTORS: *Flames, Gases, Combustion, Gas
flow, Turbulence, Jets, Jet mixing flow, Flame
propagation, *Glass, Melting.

The processes which contribute decisively to the for-
mation of flames are discussed. A mathematical con-
ception and tying in of the individual fundamental
magnitudes is today possible to a certain extent only in
flames which burn like sets. Pertinent English and
American works are referred to. (Author)

(Materials--Ceramics, TT, v. 8, no. 6)

Office of Technical Services

TT-64-14039

Gott, Otto.
COLOR MEASUREMENT (Farbmessung). 1963 [21p]
(foreign text included) 17 refs
Order from SLA \$2.60

TT-64-14039

Trans. of Glastechnische Ber[ichte] (West Germany)
1956, v. 29, no. 12, p. 453-459.

1. Gott, O.

(Materials--Ceramics, TT, v. 11, no. 12)

Office of Technical Services

The Examination of the Breakage Process with
Supersonic Techniques, by Frank Kerkhof, Helmut
Dreizler, 46 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 12, pp 459-470.

SLA 59-10619

Sci - Phys
OTS I, 12
Jul 59

92, 303

On the Calculation Of the Radiation Flux In the
Glass Metal In Tank Furnaces, by M. Czerny and
L. Cenzel.

GERMAN, per, Glastechnische Berichte, Vol XXX,
No 1, 1957, pp 1-7.

CSIRO

SLA 63-14047

Oct. 62

Theoretical Considerations on the Viscosity
of Glass, by W. Oldekop, 25 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 1, pp 8-14.

SLA 59-10621

Sci - Phys
OTS I, 12
Jul 59

92, 307

On the Structure of Quartz Glass, by F. Oberlas,
A. Dietzel,

GERMAN, par, Glastechnische Berichte, Vol XXX, No 2,
pp 37-42. 1957

C.S.I.R.O.

Sci

May 60

116,098

On the Velocity, Mechanism and Formation of
New Phases of Solid State Reactions in
Melting, by Carl Kroger, 34 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 2, pp 42-52.

SLA 59-10611

Sci - Phys
OTS I, 12
Jul 59

97,305

Lehnert, Lothar H.
THE HEAT SHOCK TESTING OF GLASS AND
GLASS CONTAINERS (Die Wärmestossprüfung von
glas und Glasgefassen). [1963] [16p] (foreign text
included) 52refs
Order from SLA \$1.60

63-20370

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 3, p. 79-83.

DESCRIPTORS: *Containers, *Glass, Temperature,
Stability, Shock resistance, Thermal stresses,
*Quenching (Cooling).

Among the various testing possibilities for the deter-
mination of the temperature change stability of glass,
the quenching test was selected and standardized. Ac-
cording to DIN 52,325 the working material "glass" is
tested with the aid of well defined samples which must
be free of strain. According to DIN 52,321 the influence
(Materials--Ceramics, TT, v. 10, no. 12) (over)

63-20370

I. Lehnert, L. H.

Office of Technical Services

A Fixed Point of the Viscosity in the
Processing Region of Glasses. Rapid
Determination of the Viscosity-Temper-
ature Course, by A. Dietzel, R. Brueckner.
GERMAN, per, Glastechnische Berichte,
Vol 30, No 3, 1957, pp. 73-9.
NTC 69-11728-11B

Sci-Mat
July 69

386,669

The Alkali Loss of the Glass Surface in Hot
Forming, by Johannes Löffler, 16 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 3, pp 88-94.

SLA 59-10610

Sci - Phys
OTS I, 12
Jul 59

92, 306

62-18134

Riedel, Leopold.
METHODS FOR TESTING HOMOGENEITY OF
MIXTURES (Verfahren zur Prüfung der Homogenität von
Gemengen). Paper [presented at] annual meeting of
Hüttentechnische Vereinigung der Deutschen Glasindus-
trie, Bad Neuenahr, 12 Oct 56. [1962] [10]p. (foreign
text included) 10 refs.
Order from SLA \$1.10

62-18134

Trans. of Glastechnische Berichte (West Germany) 1957,
v. 30, no. 4, p. 113-115.

DESCRIPTORS: *Glass, *Mixtures, Distribution, Test
methods.

Methods of testing homogeneity of mixtures, especially
with cullet, are discussed, and ways of further separa-
ting the portions insoluble in water and acid are
illustrated. (Author)
(Materials--Ceramics, TT, v. 9, no. 4)

1. Title: Cullet
- I. Riedel, L.
- II. Title: Hüttentechnische ...

Office of Technical Services

62-14497

Günther, Rudolf.

EFFECT OF MIXTURE PREPARATION AND CHARGING ON HOMOGENEITY (Einfluss der Gemengebereitung und des Einlegens auf die Homogenität). Paper before annual meeting of Hütten-technische Vereinigung der Deutschen Glasindustrie, Bad Neuenahr, 12 Oct 56. [1962] 8p. (foreign text included) 7 refs.

Order from SLA \$1.10

62-14497

Trans. of Glastechn[ische] Ber[ichte] (West Germany) 1957, v. 30, no. 4, p. 115-116.

DESCRIPTORS: *Mixtures, Weights (Analytical), *Glass, Moisture, Sand, *Fused materials, Chemical analysis, Production.

The various possible effects of mixers, handling equipment, storage bins, addition of cullet, and charging machinery on homogeneity of mixtures are discussed. (Author)

I. Günther, R.

II. Title: Hütten-technische ...

(Materials--Ceramics, TT, v. 8, no. 2)

Office of Technical Services

Löffler, Johannes.
EFFECT OF FUSION PROCESS, PARTICULARLY IN
ITS EARLY STAGES, ON HOMOGENEITY (Über den
Einfluss des Einschmelzvorganges insbesondere seiner
Ersten Stadien auf die Homogenität). [1964] [19p]
(foreign text included) 20refs
Order from SLA \$1.60

TT-64-10571

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 4, p. 117-121.

TT-(4-10571

I. Löffler, J.

(Materials--Ceramics, TT, v. 12, no. 2)

Office of Technical Services

The Melting and Dissolving of Sand in Glass,
by Hans Jebesen-Marvedel, 20 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 4, pp 122-129.

SLA 59-10613

Sci - Chem
OTS I, 12
Jul 59

92, 300

Discussion Patterns Around a Sand Particle, by
Johanna Josselyn, 15 pp.

GERMAN, per, Glastech Ber, Vol XXX, No 4, 1957,
pp 129-133.

SLA 59-10609

Sci - Phys
Sep 59
Vol 2, No 1

97, 922

62-10951

Weber-Klein, Paul.

THE RAW MATERIAL ECONOMY OF A GLASS

SMELTER, I (Die Versorgungswirtschaft einer

Glashütte I). [1962] [26]p. (foreign text included)

27 refs.

Order from SLA \$2.60

62-10951

I. Weber-Klein, P.

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 5, p. 157-163.DESCRIPTORS: *Glass, *Smelting, Fuel consumption,
Gases, Oils, Fuels, Economics.Discussed are the construction, the operation, the
supervision by measurements of producer gas, pipe-
line-gas, oil-heating, and bottled-gas installations on
the base of practical experience and statements from
the literature. (Author)

(Materials--Ceramics, TT, v. 8, no. 6)

Office of Technical Services

A Method for Combined Microscope and X-Ray
Examination of Stones in Glass, by Nina Koppen,
Otto W. Florke, 11 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 5, pp 182-186.

SLA 59-10612

CSIRO

Sci - Phys
OTS I, 12
Jul 59

92, 304

Contribution to the Knowledge of the Mean Specific Heats of Some Technically Important Glasses. IXI.
The Specific Heat of a Barium Glass, by H. Hartmann,
K. H. Kiessling, 10 pp.

GERMAN, per, Glastechn Ber, Vol XXX, No 5, 1957,
pp 186-188.

SLA 59-10607

Sci - Phys
Sep 59
Vol 2, No 1

97,919

62-10952

1. Weber-Klein, P.

Weber-Klein, Paul
THE RAW MATERIAL ECONOMY OF GLASS
SMELTER, II (Die Versorgungswirtschaft einer
Glashütte II). [1962] [40p. (foreign text included)
18 refs.

Order from SLA \$3.60 62-10952

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 6, p. 213-221.

DESCRIPTORS: *Glass, *Smelting, Blowers, Com-
pressed air, Oxygen consumption, Water supplies,
Industrial equipment, Economics.

The construction and the operation of installations is
reported on, also of standby equipment, for the air
for blowers, for vacuum, compressed air, oxygen,
water needed in plant operations, warm water, cold
water, steam, also described are installations which
receive the electric current from an external source
(Materials--Ceramics, TT, v. 8, no. 6) (over)

Office of Technical Services

Dietzel, Adolph and Deeg, Emil.
A DYNAMIC MODEL OF GLASS STRUCTURE (Ein
Dynamisches Modell der Glasstruktur). [1962]. [18]p.
(foreign text included) 8 refs.
Order from SLA \$1.60

62-18108

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1957, v. 30, no. 7, p. 282-287.

DESCRIPTORS: *Glass, Dynamics, Crystal structure,
Model tests, Tensile properties, *Fused materials,
Dioxides, Silicon compounds, Polarization, Ions, Me-
chanical properties, Stresses.

(Materials--Ceramics, TT, v. 9, no. 3).

62-18108

1. Title: Quenching
- I. Dietzel, A.
- II. Deeg, E.

Office of Technical Services

Contribution to the Optical Examination of Flat
Glass in Reflected Light, by Konrad Metzger, 13 pp.

GERMAN, per, Glastech Ber, Vol XXX, No 7, 1957,
pp 296-299.

SLA 59-10928

Sci - Phys
Sep 59
Vol 2, No 1

97, 924

On Quartz Glasses which Absorb the Ozone-
Producing Radiation Below 2000 Angstrom,
by H. Mohn. 18 p.
GERMAN, per, Glastechnische Berichte,
Vol 29, No 12, 1956, pp 483-487.
SLA TT-66-10677

Sci-M&M
Jul 66

306,004

On the Structure of Quartz Glass,
by F. Oberlies, A. Dietzel. 20p.
GERMAN, per, Glastechnische Berichte,
Vol 30, No 2, 1957, pp 37-42.
SLA TT-66-10676

Sci-M&M
Jul 66

306,003

62-14984

Giegerich, Wilhelm.
RESULTS AND PROBLEMS OF MECHANICAL BOT-
TLE PRODUCTION (Ergebnisse und Probleme der
Maschinellen Flaschenfertigung). [1962] [31]p.
(foreign text included) 50 refs.
Order from SLA \$3.60

62-14984

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 7, p. 299-307.

DESCRIPTORS: *Containers, *Glass, Production,
Manufacturing methods.

I. Giegerich, W.

(Materials--Ceramics, TT, v. 8, no. 8)

Office of Technical Services

Development of Glassmelting Pot Furnaces, by Rudolf
Gunther, Wolfgang Trier, Karl Heing Theissl, 39 pp.

GERMAN, per, Glastechnische Berichte, Vol XXX,
No 7, 1957, pp 308-318.

SLA 59-10926

Sci - Engr

Jul 59

OTS I, 11

91,032

Coloring of Glass With Tellurium, by Yasushi
Hasegawa, Syoito Kawakubo, 11 pp.

GERMAN, per, Galltech Ber, Vol XXX, No 8, pp 1957,
pp 332-335.

SLA 59-10927

Sci - Engr
Jul 59
CES I, 11

91, 133

Kerkhof, Frank.
ON THE OPTICAL TESTING OF GLASS PANES
WITH UNEVEN SURFACES (Zur Optischen Prüfung
von Glasscheiben mit Unebenen Oberflächen). [1962]
[46]p. (foreign text included) 11 refs.
Order from SLA \$4. 60

62-16414

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 9, p. 369-379.

DESCRIPTORS: *Glass, Wedges, Surfaces, Optics,
*Optical glass, Light transmission, Test methods,
Refraction, Deflection

(Physics--Optics, TT, v. 8, no. 8)

62-16414

I. Kerkhof, F.

Office of Technical Services

Glass Density and Glass Structure, by Vernon
Schwiecker, 22 pp.

GERMAN, per, Glastech Ber, Vol XXX, No 9, 1957,
pp 379-386.

SLA 59-10929

Sci - Phys
Sep 59
Vol 2, No 1

97, 925

Greschat, Karl Hans.
THE HEATING UP OF GLASS MELTING TANKS
(Über das Antempfen von Glasschmelzwannen). [1963]
[22]p. 10 refs.
Order from SLA \$2.60

63-14058

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1960, v. 98, no. 10, p. 370-376.

DESCRIPTORS: *Glass, *Furnaces, Heating, Design,
Thermal insulation.

The forces and movements occurring during the heating
up of glass melting furnaces have to be taken into
account in the construction of these furnaces and
especially in the development of the binding steel. In
this respect several suggestions are made on the
design. In addition to that, data was recently able to be
collected on the improved control of the heat-up process
(Materials--Ceramics, TT, v. 10, no. 5) (over)

63-14058

1. Greschat, K. H.

Office of Technical Services

62-10948

Thring, M. W.
HEAT TRANSFER FROM OIL FLAMES IN MELT-
ING FURNACES (Wärmelübergang aus Ölflammen in
Schmelzöfen). Lecture at Glass Technical Convention
(no. 31) Frankfurt a.M. 21 May 57. [1962] [47]p.
(foreign text included) 27 refs.
Order from SLA \$4.60

62-10948

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 10, p. 413-425.

DESCRIPTORS: *Glass, *Melting, Heat transfer,
Combustion, Flames, Oils, Fuels, Jets, Gases.

Investigations on turbulent diffusion flames operated
with gas and oil in the experimental furnace in Ymuiden
led to the setting up of a formula which permits making
a statement regarding the flame length in relation to
the air drawn in by the jet. The emission capacity of
the flame could also be calculated from the soot con-
(Materials--Ceramics, TT, v. 8, no. 6) (over)

I. Thring, M. W.
II. Title: Glass...

Office of Technical Services

Zircon Bricks as Fireproof Building Material for
Glass Melting Furnaces, by Edward Steinhoff, 39 pp.

GERMAN, per, Glastech Ber, Vol XXI, No 10, 1957,
pp 425-434.

SLA 59-10930

Sci - Engr
Jul 59
OTS I, 11

91,036

TT-64-16592

Konopicky, Kamillo, Gotthardt, Hans, and Köhler,
Emil.

STUDY ON THE ABRASION PROCESS ON AN UN-
BURNED, SILICIC ACID RICH CHAMOTTE TANK
BLOCK (Studie über den Verschleissvorgang an
Einem Ungebrannten, Kieselsäurerichen Schamotte-
Wannenstein). [19p] (foreign text included) 11refs
Order from SLA \$1.60 TT-64-16592

Trans. of Glastech[nische] Ber[ichte] (West Germany)
[1957] v. 30, no. 10, p. 434-440.

(Materials--Ceramics, TT, v. 12, no. 4)

I. Konopicky, K.
II. Gotthardt, H.
III. Köhler, E.

Office of Technical Services

Kuhn, Peter and Schimmel, Gerhard.
ELECTRON-MICROSCOPICAL INVESTIGATION OF
GLASS FIBERS (Elektronenmikroskopische Unter-
suchung von Glasfäden). [1961] [25]p. (foreign text
included) 15 refs.
Order from SLA \$2.60

61-20842

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 11, p. 463-470.

DESCRIPTORS: *Glass textiles, *Synthetic fibers,
*Electron microscopy, Separation, Microanalysis,
Gases, Selenium, Quartz, Lead, Fibers.

Very thin glass fibers were studied microscopically,
directly without recourse to a replica process.
During the irradiation, extremely thin fibers de-
veloped (for quartz glass with diameters below 15 A. u.),
which however could be picked-up unobjectionably.
(Materials--Ceramics, TT, v. 7, no. 5) (over)

61-20842

I. Kuhn, P.
II. Schimmel, G.

Office of Technical Services

Some Remarks On Lead Orthosilica and Germanate and
Their Vitrefaction, by ~~Merker~~ and others.

GERMAN, per, Glastechnische Berichte, Vol XXX,
No 11, 1957, pp 471-473.

CSIRO

SLA 62-16136

Oct. 62

Merker, Ludwig and Wondratschek, Hans.
A SERIES OF GLASSES WITH UNUSUAL COM-
POSITION (Eine Reihe von Gläsern Ungewöhnlicher
Zusammensetzung). [1962] [8]p. (foreign text in-
cluded) 5 refs.
Order from SLA \$1.10

62-16137

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1957, v. 30, no. 11, p. 473-475.

DESCRIPTORS: *Glass, *Lead compounds, *Sulfates,
Fused materials, Optics.

In the three-phase system $\text{PbO-SiO}_2\text{-SO}_3$ one obtains
homogeneous glasses with extraordinarily high SO_3
content. Some such glasses are described. (Author)

(Materials--Ceramics, TT, v. 8, no. 6)

62-16137

I. Merker, L.
H. Wondratschek, H.

Office of Technical Services

Patterson, Wilhelm and Bodmer, Ernst.
ULTRASONIC TESTING OF CAST IRONS WITH
LAMINAR AND SPHEROIDAL GRAPHITE FORMATION.
[1962] [16]p. 20 refs.
Order from SLA \$1.60

62-14424

Trans. of Giesserei. Technische-Wissenschaftliche
Beihefte (West Germany) 1957, no. 17, p. 909-917.

DESCRIPTORS: *Non-destructive testing, *Ultrasonic
radiation, Velocity, *Cast iron, *Graphite, Elasticity,
Shear stresses.

Ultrasonic speed measurements were made for both
longitudinal and transverse waves in test pieces of cast
iron with differing textural formations. From the
different speeds recorded it is possible to differentiate
between a laminar and spheroidal graphite formation.
Using the same measurements it is possible to make an
approximation of the modulus of elasticity in shear and
in tension, and Poisson's ratio. (Author)

62-14424

I. Patterson, W.
II. Bodmer, F.

(Metallurgy--Ferrous Metals,
TT, v. 10, no. 2)

Office of Technical Services

On the Measurement of Vapor Pressure and Velocity of
Vaporization of Glass Forming Substances, by Karl-
George Guntter, 17 pp.

GERMAN, per, Glastech Ber, Vol XXII, No 1, 1958,
pp 9-15.

SEA 59-16931

Sci - Chem
Sep 59
Vol 2, No 1

97918

Rötger, Helmut.

ON THE ELASTIC RELAXATION BEHAVIOR OF SIM-
PLE AND MIXED ALKALI SILICATES AND BORAX
(Über das Elastische Relaxationsverhalten von Einfachen
und Gemischten Alkali-Silikaten und von Borax). [1962]
[23]p. (foreign text included) 24 refs.
Order from SLA \$2.60

62-16139

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1958, v. 31, no. 2, p. 54-60.

DESCRIPTORS: Borax, *Borates, Alkali metal com-
pounds, *Silicates, Silicon compounds, Elasticity,
Hysteresis, Temperature, Mixtures, Relaxation time,
*Glass, Bonding, *Optical glass.

Two strongly pronounced, elastic hysteresis maxima
were always found in the temperature range from -180°
to plus 300°C with lithium, sodium and potassium sili-
cates and their mixtures. The activation energies of
(Materials--Ceramics, TT, v. 9, no. 1) (over)

62-16139

I. Rötger, H.

Office of Technical Services

Flame-Photometric Aluminum Determination in Glass,
by Friedrich Hegemann, Walter Hert, Wolfgang Schmid;
~~27~~ pp.

10

GERMAN, per, Glastech Ber Vol XXXI, No 3, 1958,
pp 81-84.

SLA 59-10932

Sci - Engr

Jul 59

OTS I, 11

91,034

Analysis of the Image of a Fracture in Flat Glass,
by Hans Jensen-Kristensen, 6 pp.

GERMAN, per, Glastech Ber, Vol XXVI, No 3, 1958,
pp 93, 94.

SLA 59-10933

Sci - Chem
Sep 59
Vol 2, No 1

97, 920

Determination of the Viscosity-Temperature Curve
With the Aid of Two Fixed Points, by Oscar Knapp,
3 pp.

GERMAN, per, Glastech Ber, Vol XXXI, No 3, 1958,
pp 94, 95.

SLA 59-10934

Sci - Chem
Sep 59
Vol 2, No 1

97, 921

The Absorption Spectra of γ -Irradiated Quartz Glasses
and Amethyst and Their Changes on Transmission of
Electric Current, by J. Lietz, W. Munnberg, 12 pp.

GERMAN, per, Glastech Ber, Vol XXXI, No 4, 1958, pp
121-124.

SIA 50-19035

Sci - Engr
Jul 59
OTS I, 11

91,035

62-18110

ON THE HYSTERESIS IN POLARIMETER CURVES
(Zur Hysteresis bei Polarimeterkurven). [1962] [19]p.
(foreign text included) 9 refs.
Order from SLA \$1.60

62-18110

Trans. of Glastechn[ische] Berichte (West Germany)
1958, v. 31, no. 4, p. 133-137.

DESCRIPTORS: *Polarographic analysis, *Hysteresis,
Glass, Metals, Bonding, *Seals, Test methods.

Polarimeter curves of glass metal seals are recorded
with a new device. The curves show a hysteresis which
depends on the velocity of the heating-and cooling proc-
ess. Reference is made to corresponding phenomena
in dilatometric measurements, and an interpretation is
submitted on the basis of the glass structure. (Author)

(Research Methods, Techniques and Equipment, TT,
v. 9, no. 4)

I. Engel, F.

Office of Technical Services

About the Leachability of "Ambulant" SO_2 from
Gas-Treated Glass Surfaces and Its Bonding to
the Building Constituents of the Glass, by
Inge Hilgenfeldt, Hans Jebsen-Marvedel, 45 pp.

GERMAN, per, Glastechnische Berichte, 1958,
Vol XXXI, No 5, pp 161-170.

SLA 59-10936

Sci - Chem
OTS I, 12
Jul 59

92, 298

Lehnert, Lothar H.
INVESTIGATION OF STRESSES IN HOLLOW GLASS
VESSELS (Über die Spannungsprüfung von
Hohlglasgefassen). [1962] [14]p. (foreign text in-
cluded) 3 refs.
Order from SLA \$1.60 62-18126

Trans. of Glastechn[ische] Berichte (West Germany)
1958, v. 31, no. 5, p. 176-179.

DESCRIPTORS: *Pressure vessels, Walls, Photo-
elasticity, *Glass, Stresses, Model tests, Light
transmission, Refractive properties.

(Materials--Ceramics, TT, v. 9, no. 3)

62-18126

I. Lehnert, L. H.

Office of Technical Services

The Heat Requirement of Silicate Glass Formation,
by Carl Kroger, Wilhelm Janetzko, ^{Carl Kroger} Kreitlow, 28 p.

GERMAN, per, Glastechnische Berichte, 1958, Vol XXXI,
No 6, pp 221-228.

SLA 59-10937

Sci
Dec 59
Vol 2, No 6

103 940

62-10935

Metzner, Roland, Scheer, Max-Martin, and
Scholze, Horst.

A RAPID QUANTITATIVE BORON DETERMINATION
IN GLASSES WITH THE AID OF THE ABSORPTION
OF NEUTRONS (Eine Schnelle Quantitative
Borbestimmung in Gläsern mit Hilfe der Absorption
von Neutronen). [1962] [16]p. (foreign text included)
8 refs.

Order from SLA \$1.60

62-10935

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1958, v. 31, no. 7, p. 257-260.

DESCRIPTORS: *Glass, *Boron, Neutron absorption,
Thermal neutrons, Determination.

A nuclear physical measuring procedure is given,
which permits a comparatively rapid and simple
quantitative determination of the B₂O₃ content of
glasses with the aid of neutron absorption in the boron.
(Materials--Ceramics, TT, v. 8, no. 6) (over)

I. Metzner, R.
II. Scheer, M.-M.
III. Scholze, H.

Office of Technical Services

Diffusion Process About Sand Grains, by J. Loffler.

GERMAN, per, Glasstechnische Berichte, Vol XXXI,
1958, pp 260-269.

CSIRO

Oct. 62

Discussion Patterns Around the Sand Barometer. ...
by Johannes Ioffler, 5 pp.

GERMAN, per, Glastech Ber. Vol XXVI, No 7, 1958,
pp 268-269.

SLA 59-10938

Sci - Phys
Sep 59
Vol 2, No 1

97, 923

Sound Insulation of Glasses and
Glazing ~~etc~~ (1) Permanently Built-In
Windows of Single Glazing, by A. Eisenberg.

GERMAN, per, Glastechnische Berichte,
Vol. XLII, No 8, 1958, pp 297-302.

CSIRO

Sci - Engr, Phys
Jul 62

204,889

Rhythmic Precipitation on Glass Through
Delayed Diffusion (Liesegang Rings), by
Hans Jøbsen-Marvedel, 14 pp.

GERMAN, per, Glastech Ber, 1958, Vol XXXI,
No 8, pp 311-315.

SLA 59-10939

Sci - Phys
OTS I, 12
Jul 59

92: 301

62-10946

Teisen, Th.
THE UNIFLOW CONTINUOUS GLASS MELTING
FURNACE (Der Uniflow-Wannen-Ofen). [1962] [19]p.
(foreign text included) 4 refs.
Order from SLA \$1.60

62-10946

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1958, v. 31, no. 9, p. 349-353.

DESCRIPTORS: *Glass, Melting, Production, Oil-
burning furnaces, Fuel consumption.

Construction and working method of the Uniflow con-
tinuous glass melting furnace is explained. This fur-
nace type is suitable above all for medium size units;
it is shown that it fulfills the requirements to be set
a good melting furnace to a high degree. (Author)

(Materials--Ceramics, TT, v. 8, no. 6)

I. Teisen, T.

Office of Technical Services

Kerkhof, Frank and Manitz, Gerhart.
FRACTURE TRACING BY INTERFERING ULTRA-
SOUND WAVES (Bruchzeichnung durch Interferierende
Ultraschallwellen). [1962] [18]p. (foreign text included)
3 refs.

Order from SLA \$1.60

62-16140

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1958, v. 31, no. 10, p. 377-381.

DESCRIPTORS: *Glass, *Fracture (Mechanics),
*Ultrasonic radiation, *Acrylic resins, Elasticity,
Brittle materials, Ultrasonics.

(Materials--Ceramics, TT, v. 8, no. 6)

62-16140

I. Kerkhof, F.
II. Manitz, G.

Office of Technical Services

Silk-Screening; A Decorating Process for Glass, by
Kurt Beversdorfer, 30 pp.

GERMAN, per, Glastechnische Berichte, Vol XXXI,
No 10, 1958, pp 386-394.

SLA 59-10940

Sci - Engr
Jul 59
OTS I, 11

91,031

Infra-Red Bands in Freshly Prepared and
Weathered B_2O_3 Glass, by R. Bruckner,
H. Scholze.

GERMAN, par, Glastechnische Berichte,
Vol XXI, 1958, pp 417-422.

CSIRO

Sci - Phys
Jul 62

203,457

Electrical Surface Conductivity of Glass Fibers, by
W. Hinz, 13 p.

13

GERMAN, per, Glastech Ber, 1958, Vol XXI, No 11,
3pp 422-428.

ATS-36L35G

Sci
Apr 60
Vol III, No 2

113,569

Löffler, Johannes.

RAPID METHOD FOR THE DIFFERENTIATION OF
WALL AND BATCH STRIAE (Schnellmethode zur
Unterscheidung von Wand- und Gemengeschlieren).
[1962] [11]p. (foreign text included) 6 refs.
Order from SLA \$1.60

62-14867

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1958, v. 31, no. 11, p. 428-431.

DESCRIPTORS: *Glass, Stratification, Interference,
Analysis, Refractory materials.

Striae due to the batch usually occupy a large space
within the glass and have a gradual transition to the
chemical composition from striated glass to normal
glass. Striae due to the refractory walls usually occupy
only a very small portion of the glass and have a very
sudden transition from striae to normal glass. On
(Materials--Ceramics, TT, v. 9, no. 2) (over)

62-14867

1 Löffler, J.

Office of Technical Services

61-10507

Jebsen-Marwedel, Hans.
TWO LAYER GLAZES IN CERAMICS AND EN-
AMELING AS ANALOGUES TO MATERIAL INTER-
CHANGE PROCESSES AT THE SURFACES OF IN-
HOMOGENEOUS GLASS MELTS [Keramische und
Emailtechnische Zweischichtglasuren als Analogon zu
Substanzwechselforgängen an der Oberfläche
Inhomogener Glasschmelzen]. [1960] [25]p. 15 refs.
Order from SLA ml\$2.70, ph\$4.80 61-10507

Trans. of Glasstechnische Berichte (West Germany)
1958, v. 31, no. 11, p. 431-438.

It is shown that surface energy processes which take
place at the surfaces of glass melts greatly affect the
material interchange. They occur in an analogous
way in ceramic two layer glazes, and in enameling,
and thus afford an explanation for certain decorative
effects as well as for the troublesome effect of a gas
phase in the form of bubbles within the glaze or
enamel layers. The analogy of the two fields affords
(Materials--Ceramics, TT, v. 3, no. 8) (over)

1. Glass--Melting
2. Glass--Surface tension
1. Jebsen-Marwedel, H.

151445

Office of Technical Services

62-14247

Scholze, Horst.
THE INCORPORATION OF WATER IN GLASSES.
III. INFRARED MEASUREMENTS OF OTHER GLASSES.
[1962] 6p. (2 figs. omitted) 7 refs.
Order from SLA \$1.10

62-14247

I. Scholze, H.
II. Title: Infrared...

Trans. of Glastechnische Berichte (West Germany)
1959, v. 32, no. 7, p. 278-281.

DESCRIPTORS: *Glass, *Infrared spectroscopy, Water,
Silicates, Fluorine, *Silica-free glass, Borax, Pro-
duction, *Ceramic materials.

(Materials--Ceramics, TI, v. 9, no. 5)

Office of Technical Services

62-16410

Wille, R.
AIR COOLING OF GLASS MOLDS (Luftkühlung von
Glasformen). [1962] [27]p. (foreign text included)
9 refs.
Order from SLA \$2.60 62-16410

Trans. of Glastechnische Berichte (West Germany)
1959, v. 32K, p. II/26-II/32.

DESCRIPTORS: *Glass, Molding, Heat transfer, Air
cooled, Cooling.

The report summarizes experiments dealing with the
transfer of heat from the outside wall of a glass mould
to the cooling air. The experiments were performed
with stationary, heated models corresponding to
average working moulds in dimensions, heat loading
and temperatures. The cooling air energy was studied
for smooth moulds and circular jets by varying the
quantity of air and the jet velocity. In addition to
(Materials--Ceramics, TT, v. 8, no. 7) (over)

- I. Wille, R.
- II. Title: International
Congress on Glass (no. 5)
- III. Title: Internationaler
Glaskongress (no. 5)

Office of Technical Services

Laethem, R. van, Leger, L. and others.
 MEASUREMENT OF THE RADIATION OF GLASS
 USING THE BOLOMETER: APPLICATION TO THE
 MEASUREMENT OF THE TEMPERATURE (Mesure
 de la Radiation du Verre par Bolometre: Application a
 la Mesure de Temperature). [1962] [54]p. (foreign
 text included) 4 refs.
 Order from SLA \$5.60

62-16411

Trans. of Glastechnische Berichte (West Germany)
 1959, v. 32K, p. II/36-II/49.

DESCRIPTORS: *Glass, Temperature, Heat transfer,
 *Infrared radiation, Infrared detectors, *Bolometers,
 Pyrometers, Furnaces.

The temperature distribution in glass circulating in a
 tank is very variable. It often happens that the tem-
 perature at the surface is lower than that at a certain
 depth. If the optical arrangement of the bolometer is
 (Material--Ceramics, TT, v. 8, no. 7) (over)

62-16411

- I. Laethem, R. van
- II. Leger, L.
- III. Title: Application . . .
- IV. Title: International
Congress on Glass (no. 5)
- V. Title: Internationaler
Glaskongress (no. 5)

Office of Technical Services

Flörke, Otto W.
ON SILICIC ACID CRYSTALS IN GLASS (Über
Kieselsäurekristalle in Gläsern). [1962] [31]p. (foreign
text included) 26 refs.
Order from SLA \$3.60

62-14886

Trans. of Glastechnische Berichte (West Germany) 1959,
v. 32, no. 1, p. 1-9.

DESCRIPTORS: *Glass, *Silicic acids, Silicates,
Crystallization, Crystal structure, Quartz, Phase
transitions, Microstructure.

After an introductory discussion of the phase diagram
of silicic acid, the different technically important crys-
tal types of SiO_2 are defined; furthermore a survey of
the growth of crystals and crystal skeleton is given.
Following this the different crystal types are discussed
in the varying forms in which they appear in glass:
(Materials--Ceramics, TT, v. 9, no. 3) (over)

62-14886

I. Flörke, O. W.

Off. of Technical Services

Hegemann, Frederick, Schmidt, Wolfgang, and
Hert, Walter.

ON THE EFFECT OF FOREIGN IONS ON THE
FLAME-SPECTROMETRIC DETERMINATION OF
SODIUM AND POTASSIUM IN GLASS ANALYSIS.
[1960] [19]p. 7 refs.

Order from SLA ml\$2.40, ph\$3.30 61-10508

Trans. of Glastechnische Berichte (West Germany)
1959, v. 32, no. 1, p. 13-19.

Research on the disturbing influence of Al, Fe, Mg
and Li, on the flame spectrometric determination of
Na and K show that K determination is especially
sensitive to Al and Fe. On increasing the solution
concentration, while keeping however the ratio of
alkali to foreign elements constant, the disturbance
increases. The influence on the Na and K determina-
tion of Fe and Li can to a large extent be reduced
through the addition of BaCl₂ to the standard and test
solutions. The disturbing influence of Al can be
(Materials--Ceramics, TT, v. 3, no. 8) (over)

61-10508

1. Glass--Analysis
2. Sodium--Determination
3. Potassium--Determination
4. Hydrogen ions--Chemical effects

- I. Hegemann, F.
- II. Schmidt, W.
- III. Hert, W.

151446

Office of Technical Services

Kessler, W. and Scheibe, G.
SPECTRUM ANALYSIS METHODS, THEIR ACCURACY
AND THEIR APPLICATION TO GLASS. 1 Apr 60, .6p.
(8 figs. omitted) 27 refs.
Order from SLA \$1.60

62-14250

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1959, v. 32K, p. 1/33-1/40.

DESCRIPTORS: *Glass, Spectrographic analysis,
Aluminum compounds, Iron compounds, Oxides, Sheets,
Electrodes, Errors, X-rays, Fluorescence, Optics.

After an historical review of emission spectrography
the general basis of this analytical method is discussed.
The various sources of error are then described, and it
is shown how these can be eliminated by applying suitable
principles of measurement. It has been found that
the main source of error in applying this method to the
(Materials--Ceramics, TT, v. 9, no. 5) (over)

62-14250

- I. Kessler, W.
- II. Scheibe, G.
- III. Title: International
Congress on Glass
(no. 5)
- IV. Title: Internationaler
Glaskongress (no. 5)

Office of Technical Services

61-10514

Bošnjakovic, Franz.
THE SIGNIFICANCE OF THE SECOND AXIOM OF
THERMODYNAMICS FOR THE HEAT BALANCE
OF FURNACES. [1960] [23]p. 6 refs.
Order from SLA ml\$2.70, ph\$4.80 61-10514

Trans. of Glasstechnische Berichte (West Germany)
1959, v. 32, no. 2, p. 41-47.

61-10514

1. Furnaces--Heating
2. Thermodynamics
- I. Bošnjakovic, F.

Office of Technical Services

(Physics--Thermodynamics, TT, v. 5, no. 8)

Geffcken, W. and Neuroth, N.
HEAT EFFECTS IN GLASS WITHIN THE TRANS-
FORMATION RANGE. 24 Feb 60, 9p. (11 figs. omit-
ted) 5 refs.

Order from SLA \$1.10

62-14251

Trans. of Glastechn[ische] Ber[ichte] (West Germany)
1959, v. 32K, p. V/48-V 53.

DESCRIPTORS: *Glass, *Transformations, Transition
temperature, Heat transfer, Thermal conductivity,
Thermodynamics.

(Materials--Ceramics, TI, v. 9, no. 5)

62-14251

- I. Title: Kirchhoff law
- I. Geffcken, W.
- II. Neuroth, N.
- III. Title: International
Congress on Glass (no. 5)
- IV. Title: Internationaler
Glaskongress (no. 5)

Office of Technical Services

61-10512

Buss, Wilhelm and Reumuth, Horst.
PROGRESS MADE IN THE MICROSCOPIC RESEARCH
ON GLASS SMELTING PROCESSES AT TEMPER-
ATURES UP TO 1,600°C (Fortschritte in der
Mikroskopischen Erforschung von Glasschmelz-
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1. Glass--Phase studies
 2. Phase microscopy--
Applications
 3. High temperature research
- I. Buss, W.
II. Reumuth, H.

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